

AMENDMENT TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) An air purifier comprising:

a high mass-flow rate air-mover having an inlet and an outlet,

a low mass-flow rate ultra-violet radiation decontamination device having an inlet and an outlet, said outlet being formed at an outlet end of the decontamination device and the outlet end of the decontamination device being formed to flare outwardly such that it operates as a diffuser,

said air mover capable of generating a low mass-flow rate air flow by moving ambient air into said inlet of said decontamination device, through said decontamination device so as to pass for an operative dwell time in operative proximity to at least one UV emitter mounted in said decontamination device and so as to exit from said outlet of said decontamination device,

said air-mover spaced from said decontamination device so as to draw into said inlet of said air-mover a second air-flow of said ambient air, said second air flow flowing along a second flow path wherein said second flow path does not flow within said operative proximity to said at least one UV emitter,

wherein said low mass-flow rate air flow and said second air flow cumulatively form a high mass-flow rate flow being urged by said air-mover through said air-mover so as to expel said high mass-flow rate air flow into said ambient air.
2. (original) The air purifier of claim 1 wherein said air-mover and said decontamination device are rigidly mounted vertically spaced from one another within a housing.

3. (previously cancelled)
4. (previously cancelled)
5. (previously presented) The air purifier of claim 1 wherein said air-mover is a blower and said UV emitter is mounted within a duct.
6. (cancelled)
7. (previously presented) The air purifier of claim 2 wherein said housing has an outlet aperture in a first surface of said housing and at least one inlet aperture in a second surface of said housing, said housing otherwise being substantially sealed to air flow, said outlet aperture communicating with said outlet of said air-mover, said at least one inlet aperture adjacent said inlet of said decontamination device, said at least one inlet aperture communicating ambient air flow of said ambient air into both said second flow and said low mass-flow rate flow.
8. (original) The air purifier of claim 7 wherein said outlet aperture does not face in the same direction as said at least one inlet aperture whereby air flow from said outlet aperture exhausting into said ambient air may recirculate within the air space of an enclosure in which said air purifier is placed before being re-drawn as said ambient air flow into said at least one inlet aperture.
9. (previously cancelled)
10. (previously presented) The air purifier of claim 1 wherein said decontamination device includes a duct in which the UV emitter is mounted and said duct is aligned so that said low mass-flow rate air flow through said duct is orthogonal to a plane substantially containing said inlet of said air-mover.
11. (previously presented) The air purifier of claim 10 wherein said duct is elongate and aligned orthogonally to an exhaust direction of said air-mover.
12. (previously presented) The air purifier of claim 7 wherein said at least one inlet aperture is generally perpendicular to said outlet aperture.

13. (previously cancelled)
14. (previously cancelled)
15. (previously cancelled)
16. (original) The air purifier of claim 7 wherein said second air flow and said low mass-flow rate air flow are ducted in a common duct containing said at least one UV emitter.
17. (previously cancelled)
18. (original) The air purifier of claim 16 wherein said decontamination device and said air-mover are co-axial along the substantial air flow directions of said second air flow, said low mass-flow rate air flow, and an exhaust air flow direction from said outlets of said air mover and said decontamination device.
19. (previously cancelled)
20. (previously cancelled)

21. (currently amended) An air purifier comprising:

a housing having a housing inlet and a housing outlet;

a low mass-flow rate ultra-violet radiation decontamination device having an inlet spaced from the housing inlet and an outlet, the low mass flow rate decontamination device being positioned within the housing to create a bypass space between the housing and the decontamination device, such that a high-mass flow of air passing through the air purifier from the housing inlet to the housing outlet can pass through the decontamination device and through the bypass space without passing through the decontamination device, [[and]]

a baffle positioned over the inlet of the decontamination device to act on an air flow passing through the decontamination device, and

wherein an end of the decontamination device adjacent the outlet of the decontamination device is formed to flare outwardly to form a diffuser.

22. (previously presented) The air purifier of claim 21 wherein the decontamination device includes a UV emitter mounted within a duct and the baffle is positioned upstream from the UV emitter.

23. (previously presented) The air purifier of claim 21 wherein the decontamination device is aligned so that the flow through the device is substantially parallel to the flow from the housing inlet to the housing outlet.

24. (previously presented) The air purifier of claim 21 wherein the decontamination device is positioned so that the flow through the decontamination device is not parallel to the flow from the housing inlet to the housing outlet.

25. (previously presented) The air purifier of claim 21 further comprising a blower to urge the high-mass flow of air to move through the housing.

26. (previously presented) The air purifier of claim 21 wherein the housing inlet is generally perpendicular to the housing outlet.

09/855,546
Page 6

27. (cancelled)

28. (currently amended) An air purifier comprising:

a housing having a base, walls and a housing inlet and a housing outlet formed through the walls;

a high mass-flow rate air-mover within the housing and capable of being operated to move a high mass-flow of air through the housing from the housing inlet to the housing outlet;

a low mass-flow rate ultra-violet radiation decontamination device having an inlet and an outlet, the low mass-flow rate decontamination device being positioned within the housing and creating a bypass space between the housing and the decontamination device, such that the high mass-flow of air passing from the housing inlet to the housing outlet can pass through the decontamination device and through the bypass space without passing through the decontamination device; [[and]]

a plurality of wheels and/or casters on which the base is mounted to permit the air purifier to be transportable; and

wherein an end of the decontamination device adjacent the outlet of the decontamination device is formed to flare outwardly to form a diffuser.

29. (previously presented) The air purifier of claim 28 further comprising a handle connected to the housing to permit pushing of the housing while riding on the wheels and/or casters.

30. (previously presented) The air purifier of claim 28 further comprising a plurality of louvers positioned over the housing inlet and mounted to incline upwardly such that ultraviolet rays passing from the housing are deflected upwardly away from the base.

31. (previously presented) The air purifier of claim 28 wherein the decontamination device includes baffles positioned to act on an air flow passing through the decontamination device.

09/855,546
Page 8

32. (previously presented) The air purifier of claim 28 wherein the walls include a top wall and wherein the air purifier further comprises controls mounted on the top wall outside surface.